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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,071	04/08/2002	Georg Schneider	WI.1706PCT-US	6951

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EXAMINER

HINZE, LEO T

ART UNIT

PAPER NUMBER

2854

DATE MAILED: 04/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/089,071

Applicant(s)

SCHNEIDER ET AL.

Examiner

Leo T. Hinze

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 April 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 15-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 April 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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## DETAILED ACTION

### *Double Patenting*

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 15-34 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 17-48 of copending Application No. 10/089,070. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims are drawn to a cylinder of a rotary

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printing press comprising a cylinder base body, a cylinder outer body, and tempering flow chambers between said cylinder base body and said cylinder outer body.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Claim Objections***

3. Claims 21-24, 26, 28, 30, and 32 are objected to because of the following informalities:

Regarding claim 21, it appears that "circular" in line 7 should be --annular--.

Regarding claim 21, it appears that "area" should be inserted after "cross-section" in lines 7 and 8.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any

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evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 15-20, 25, 27, 29, 31, 33, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rau et al., USPN 5,784,957, in view of Withers, Jr. et al., USPN 3,847,212.

Rau teaches:

- a cylinder (43) of a rotary printing press (1) comprising: a cylinder base body (51) having a circumference; a cylinder outer body (50) supported on, and spaced from said cylinder base body; a flow path (53), through which a tempering medium can flow, and being defined by said cylinder base body circumference and said cylinder outer body, said circumference having a spiral shaped conduit (53), said cylinder outer body conducting printing ink (e.g. Fig. 3) (claim 15);
- further including strips (78) on said cylinder base body circumference, said strips supporting said cylinder outer body on said cylinder base body (Fig. 3.) (claim 16);
- wherein said conduit has a first cross-sectional area and further wherein said cylinder outer body has a shell surface having a second cross-sectional area (claim 18);
- wherein said strip has a first width and further wherein said cylinder outer body has a wall thickness (claim 19);
- further including a supply line (53) and a removal line (57) for said tempering medium (claim 25);

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- further including at least one journal (45) for supporting said cylinder, said supply line and said removal line being coaxially arranged in said journal (Fig. 3) (claim 27);
- wherein said cylinder is an inking roller (7) (claim 29);
- wherein said cylinder is an screen roller (75) (claim 31);
- wherein said cylinder outer body has a wall thickness and an axial length (claim 33).

Rau does not teach:

- having a multiplex-threaded, spiral shaped conduit (claim 15);

Withers teaches a heat transfer tube (10) having multiplex-threaded spiral ridges (16, 18).

Regarding claim 15, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Rau to have multiplex-threaded spiral conduits, because Withers teaches that multiple start conduits have higher heat transfer coefficients for a given degree of either severity or of pressure drop when compared to single threaded ridges (e.g. col. 2, line 65 through col. 3, line 3).

Regarding claims 16, 25, 27, 29, and 31, the combination of Rau and Withers teaches all that is claimed as discussed above.

Regarding claims 17-20, 33, and 34, the combination of Rau and Withers teaches all that is claimed as discussed in the above rejections of claims 15, 16, 25, 27, 29, and 31, except for:

- wherein said conduit is octuply-threaded (claim 17);
- wherein a ratio of said first and second cross-sectional areas is in the range of 1: 1200 to 1: 1600 (claim 18);

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- wherein a ratio of said first width to said wall thickness is less than or equal to 2 (claim 19);
- wherein said ratio of said first width to said wall thickness is less than or equal to 1.5 (claim 20);
- wherein a ratio of said wall thickness to said axial length is in a range of 1:200 to 1:1200 (claim 33);
- wherein said range is between 1:400 and 1:1000 (claim 34).

Regarding claim 17, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Rau wherein said conduit is octuply-threaded, as one having ordinary skill in the art could easily determine the optimum number of threads through obvious routine experimentation.

Regarding claims 18-20, 33, and 34, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Rau to have dimensions such that it has the ratios recited, as the optimum dimensions and ratios of the cylinder could easily be determined by one having ordinary skill in the art through obvious routine experimentation.

7. Claims 21-24, 26, 28, 30, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rau et al., USPN 5,595,115.

Rau teaches:

- a cylinder (43) of a rotary printing press (10) comprising: a cylinder base body (51) having a circumference; a cylinder outer body (50) spaced from said cylinder base body and having a shell surface; and an axially extending gap (53) defined by said spaced

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cylinder base body and said cylinder outer body and through which a tempering medium can flow, said gap having a generally circular profile, said gap having a cross-section, said shell surface having a shell surface area (Fig. 3) (claim 21);

- wherein said cylinder base body and said cylinder outer body are unsupported by each other (Fig. 3) (claim 22);
- further including a supply line (52) and a removal line (57) for said tempering medium (claim 26);
- further including at least one journal (45) for supporting said cylinder, said supply line and said removal line being coaxially arranged in said journal (Fig. 3) (claim 28);
- wherein said cylinder is an inking roller (7) (claim 30);
- wherein said cylinder is an screen roller (75) (claim 32).

Rau does not teach:

- a ratio of said gap cross-section to said shell surface area being between 1:200 and 1:600 (claim 21);
- wherein said ratio is between 1:300 and 1:500 (claim 23);
- wherein said gap has a gap clearance of between 2 to 5 mm (claim 24).

Regarding claim 21, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Rau wherein a ratio of said gap cross-section to said shell surface area is between 1:200 and 1:600, as the ratio of said gap cross-section area to said shell surface area shown in Rau are generally similar to the claimed relationship, and the



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optimum dimensions and ratios of the cylinder could easily be determined by one having ordinary skill in the art through obvious routine experimentation.

Regarding claims 22, 26, 28, 30, and 32, Rau teaches all that is claimed as discussed in the above rejection of claim 21.

Regarding claims 23 and 24, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Rau to have dimensions such that it has the ratios recited, as the ratio of said wall thickness to said axial length shown in Rau are generally similar to the claimed relationship, and the optimum dimensions and ratios of the cylinder could easily be determined by one having ordinary skill in the art through obvious routine experimentation.

### *Conclusion*

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. Wech et al., USPN 6,109,177, Silvestre, USPN 5,881,643, Helms et al., USPN 5,676,754, Helms et al., USPN 5,571,563, and Scannell, USPN 5,292,298 each teach a cylinder having obvious similarities to the instant application.

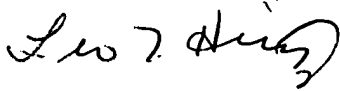
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leo T. Hinze whose telephone number is (703) 305-3339. The examiner can normally be reached on M-F 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (703) 305-6619. The fax phone numbers for


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the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-0952.



Leo T. Hinze  
Patent Examiner  
AU 2854  
April 15, 2003

  
**LESLIE J. EVANISKO**  
**PRIMARY EXAMINER**